

R.W. Paper No. 19  
3/19/02

1647

R. DeBerry

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/509,559B

DATE: 03/19/2002  
TIME: 14:10:44

Input Set : A:\PTO.VSK.txt  
Output Set: N:\CRF3\03192002\I509559B.raw

3 ::110:: APPLICANT: Forssmann, Wolf-Georg  
5 ::120:: TITLE OF INVENTION: Cadherin derived growth factor and its use  
7 ::130:: FILE REFERENCE: P65315US0  
9 ::140:: CURRENT APPLICATION NUMBER: 09/509,559B  
10 ::141:: CURRENT FILING DATE: 2000-11-27  
12 ::150:: PRIOR APPLICATION NUMBER: DE 19745284.1  
13 ::151:: PRIOR FILING DATE: 1997-10-15  
15 ::150:: PRIOR APPLICATION NUMBER: DE 19813088.0  
16 ::151:: PRIOR FILING DATE: 1998-03-25  
18 ::160:: NUMBER OF SEQ ID NOS: 14  
20 ::170:: SOFTWARE: PatentIn Ver. 2.1  
22 ::210:: SEQ ID NO: 1  
23 ::211:: LENGTH: 123  
24 ::212:: TYPE: PRT  
25 ::213:: ORGANISM: Homo sapiens  
27 ::400:: SEQUENCE: 1  
28 Cys His Pro Gly Phe Asp Ala Glu Ser Tyr Thr Phe Thr Val Pro Arg  
29 1 5 10 15  
31 Arg His Leu Glu Arg Gly Arg Val Leu Gly Arg Val Asn Phe Cys Thr  
32 20 25 30  
34 Gly Arg Gln Arg Thr Ala Tyr Phe Ser Leu Asp Thr Arg Phe Lys Val  
35 35 40 45  
37 Gly Thr Asp Gly Val Ile Thr Val Lys Arg Pro Leu Arg Phe His Asn  
38 50 55 60  
40 Pro Gln Ile His Phe Leu Val Tyr Ala Trp Asp Ser Thr Tyr Arg Lys  
41 65 70 75 80  
43 Phe Ser Thr Lys Val Thr Leu Asn Gly His His Arg Pro Pro Pro  
44 85 90 95  
47 His Gln Ala Ser Val Ser Gly Ile Gln Ala Glu Leu Leu Thr Phe Pro  
48 100 105 110  
50 Asn Ser Ser Pro Gly Leu Arg Arg Gln Lys Arg  
51 115 120  
54 ::210:: SEQ ID NO: 2  
55 ::211:: LENGTH: 132  
56 ::212:: TYPE: PRT  
57 ::213:: ORGANISM: Homo sapiens  
59 ::400:: SEQUENCE: 2  
61 Glu Ala Ser Gly Glu Ile Ala Leu Cys Lys Thr Gly Phe Pro Glu Asp  
62 1 5 10 15  
63 Val Tyr Ser Ala Val Leu Ser Lys Asp Val His Glu Gly Gln Pro Leu  
64 20 25 30  
65 Leu Asn Val Phe Ser Asn Cys Asn Gly Lys Arg Lys Val Gln Tyr Glu  
66 35 40 45

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/509,559B

DATE: 03/19/2002  
TIME: 14:10:44

Input Set : A:\PTO.VSK.txt  
Output Set: N:\CRF3\03192002\I509559B.raw

69 Ser Ser Glu Pro Ala Asp Phe Lys Val Asp Glu Asp Gly Met Val Tyr  
70 50 55 60  
72 Ala Val Arg Ser Phe Pro Leu Ser Ser Glu His Ala Lys Phe Leu Ile  
73 65 70 75 80  
75 Tyr Ala Gln Asp Lys Glu Thr Gln Glu Lys Trp Gln Lys Leu Ser Leu  
76 85 90 95  
78 Lys Pro Thr Leu Thr Glu Glu Ser Val Lys Glu Ser Ala Glu Val Glu  
79 100 105 110  
81 Glu Ile Val Phe Pro Arg Gln Phe Ser Lys His Ser Gly His Leu Gln  
82 115 120 125  
84 Arg Gln Lys Arg  
85 130  
88 <210> SEQ ID NO: 3  
89 <211> LENGTH: 78  
90 <212> TYPE: PRT  
91 <213> ORGANISM: Homo sapiens  
93 <400> SEQUENCE: 3  
94 Cys Arg Ala Val Phe Arg Glu Ala Glu Val Thr Leu Glu Ala Gly Gly  
95 1 5 10 15  
97 Ala Glu Gln Glu Pro Gly Gln Ala Leu Gly Lys Val Phe Met Gly Gln  
98 20 25 30  
100 Glu Pro Ala Leu Phe Ser Thr Asp Asn Asp Asp Phe Thr Val Arg Asn  
101 35 40 45  
103 Gly Glu Thr Val Gln Glu Arg Arg Ser Leu Lys Glu Arg Asn Pro Leu  
104 50 55 60  
106 Lys Ile Phe Pro Ser Lys Arg Ile Leu Arg Arg His Lys Arg  
107 65 70 75  
110 <210> SEQ ID NO: 4  
111 <211> LENGTH: 144  
112 <212> TYPE: PRT  
113 <213> ORGANISM: Homo sapiens  
115 <400> SEQUENCE: 4  
116 His Asn Glu Asp Leu Thr Thr Arg Glu Thr Cys Lys Ala Gly Phe Ser  
117 1 5 10 15  
119 Glu Asp Asp Tyr Thr Ala Leu Ile Ser Gln Asn Ile Leu Glu Gly Glu  
120 20 25 30  
122 Lys Leu Leu Gln Val Lys Ser Ser Cys Val Gly Thr Lys Gly Thr Gln  
123 35 40 45  
125 Tyr Glu Thr Asn Ser Met Asp Phe Lys Gly Ala Asp Gly Thr Val Phe  
126 50 55 60  
128 Ala Thr Arg Glu Leu Gln Val Pro Ser Glu Gln Val Ala Phe Thr Val  
129 65 70 75 80  
131 Thr Ala Trp Asp Ser Gln Thr Ala Glu Lys Trp Asp Ala Val Leu Val  
132 85 90 95  
134 Ala Gln Thr Ser Ser Pro His Ser Gly His Lys Pro Gln Lys Gly Lys  
135 100 105 110  
137 Lys Val Val Ala Leu Asp Pro Ser Pro Pro Pro Lys Asp Thr Leu Leu  
138 115 120 125  
141 Pro Trp Pro Gln His Gln Asn Ala Asn Gly Leu Arg Arg Arg Lys Arg

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/509,559B

DATE: 03/19/2002  
TIME: 14:10:44

Input Set : A:\PTO.VSK.txt  
Output Set: N:\CRF3\03192002\I509559B.raw

142 130 135 140  
148 <(210)> SEQ ID NO: 5  
149 <(211)> LENGTH: 22  
150 <(212)> TYPE: PRT  
151 <(213)> ORGANISM: Homo sapiens  
153 <(400)> SEQUENCE: 5  
154 Ala Gly Ala Asn Pro Ala Gln Arg Asp Thr His Ser Leu Leu Pro Thr  
155 1 5 10 15  
157 His Arg Arg Gln Lys Arg  
158 20  
161 <(210)> SEQ ID NO: 6  
162 <(211)> LENGTH: 35  
163 <(212)> TYPE: PRT  
164 <(213)> ORGANISM: Homo sapiens  
166 <(400)> SEQUENCE: 6  
167 Thr Leu Ser Thr Pro Leu Ser Lys Arg Thr Ser Gly Phe Pro Ala Lys  
168 1 5 10 15  
170 Lys Arg Ala Leu Glu Leu Ser Gly Asn Ser Lys Asn Glu Leu Asn Arg  
171 20 25 30  
173 Ser Lys Arg  
174 35  
177 <(210)> SEQ ID NO: 7  
178 <(211)> LENGTH: 33  
179 <(212)> TYPE: PRT  
180 <(213)> ORGANISM: Homo sapiens  
182 <(400)> SEQUENCE: 7  
183 Thr Leu Ser Thr Pro Leu Ser Lys Arg Thr Ser Gly Phe Pro Ala Lys  
185 1 5 10 15  
187 Lys Arg Ala Leu Glu Leu Ser Gly Asn Ser Lys Asn Glu Leu Asn Arg  
188 20 25 30  
190 Ser  
194 <(210)> SEQ ID NO: 8  
195 <(211)> LENGTH: 54  
196 <(212)> TYPE: PRT  
197 <(213)> ORGANISM: Homo sapiens  
199 <(400)> SEQUENCE: 8  
200 Met Leu Leu Asp Leu Trp Thr Pro Leu Ile Ile Leu Trp Ile Thr Leu  
201 1 5 10 15  
203 Pro Pro Cys Ile Tyr Met Ala Pro Met Asn Gln Ser Gln Val Leu Met  
204 20 25 30  
206 Ser Gly Ser Pro Leu Glu Leu Asn Ser Leu Gly Glu Glu Gln Arg Ile  
207 35 40 45  
209 Leu Asn Arg Ser Lys Arg  
210 50  
213 <(210)> SEQ ID NO: 9  
214 <(211)> LENGTH: 31  
215 <(212)> TYPE: PRT  
216 <(213)> ORGANISM: Homo sapiens  
218 <(400)> SEQUENCE: 9

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/509,559B

DATE: 03/19/2002  
TIME: 14:10:44

Input Set : A:\PTO.VSK.txt  
Output Set: N:\CRF3\03192002\I509559B.raw

219 Phe Ala Pro Glu Arg Arg Gly His Leu Arg Pro Ser Phe His Gly His  
220 1 5 10 15  
222 His Glu Lys Gly Lys Glu Gly Gln Val Leu Gln Arg Ser Lys Arg  
223 20 25 30  
226 <210> SEQ ID NO: 10  
227 <211> LENGTH: 26  
228 <212> TYPE: PRT  
229 <213> ORGANISM: Homo sapiens  
231 <400> SEQUENCE: 10  
232 Glu Arg Arg Gly His Leu Arg Pro Ser Phe His Gly His His Glu Lys  
233 1 5 10 15  
235 Gly Lys Glu Gly Gln Val Leu Gln Arg Ser  
236 20 25  
239 <210> SEQ ID NO: 11  
240 <211> LENGTH: 31  
241 <212> TYPE: PRT  
242 <213> ORGANISM: Homo sapiens  
244 <400> SEQUENCE: 11  
245 Gln Pro Gln Pro Gln Gln Thr Leu Ala Thr Glu Pro Arg Glu Asn Val  
246 1 5 10 15  
248 Ile His Leu Pro Gly Gln Arg Ser His Phe Gln Arg Val Lys Arg  
249 20 25 30  
252 <210> SEQ ID NO: 12  
253 <211> LENGTH: 29  
254 <212> TYPE: PRT  
255 <213> ORGANISM: Homo sapiens  
257 <400> SEQUENCE: 12  
258 Gln Pro Gln Pro Gln Gln Thr Leu Ala Thr Glu Pro Arg Glu Asn Val  
259 1 5 10 15  
261 Ile His Leu Pro Gly Gln Arg Ser His Phe Gln Arg Val  
262 20 25  
265 <210> SEQ ID NO: 13  
266 <211> LENGTH: 129  
267 <212> TYPE: PRT  
268 <213> ORGANISM: Homo sapiens  
270 <400> SEQUENCE: 13  
271 Glu Asp Leu Asp Cys Thr Pro Gly Phe Gln Gln Lys Val Phe His Ile  
272 1 5 10 15  
274 Asn Gln Pro Ala Glu Phe Ile Glu Asp Gln Ser Ile Leu Asn Leu Thr  
275 20 25 30  
277 Phe Ser Asp Cys Lys Gly Asn Asp Lys Leu Arg Tyr Glu Val Ser Ser  
278 35 40 45  
280 Pro Tyr Phe Lys Val Asn Ser Asp Gly Gly Leu Val Ala Leu Arg Asn  
281 50 55 60  
283 Ile Thr Ala Val Gly Lys Thr Leu Phe Val His Ala Arg Thr Pro His  
284 65 70 75 80  
286 Ala Glu Phe Asp Met Ala Glu Leu Val Ile Val Gly Gly Lys Asp Ile  
287 85 90 95  
289 Ser Leu Gln Asp Ile Phe Lys Phe Ala Arg Thr Ser Pro Val Pro Arg

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/509,559B

DATE: 03/19/2002  
TIME: 14:10:44

Input Set : A:\PTO.VSK.txt  
Output Set: N:\CRF3\03192002\I509559B.raw

290 100 105 110  
292 Gln Lys Arg Pro Ser Val Leu Leu Ser Leu Phe Ser Leu Ala Cys  
293 115 120 125  
295 Leu  
299 <210> SEQ ID NO: 14  
300 <211> LENGTH: 39  
301 <212> TYPE: PRT  
302 <213> ORGANISM: Homo sapiens  
304 <400> SEQUENCE: 14  
305 Val Pro Gly Trp Arg Arg Pro Thr Thr Leu Tyr Pro Trp Arg Arg Ala  
306 1 5 10 15  
308 Pro Ala Leu Ser Arg Val Arg Arg Ala Trp Val Ile Pro Pro Ile Ser  
309 20 25 30  
311 Val Ser Glu Asn His Lys Arg  
312 35

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/509,559B

DATE: 03/19/2002

TIME: 14:10:45

Input Set : A:\PTO.VSK.txt

Output Set: N:\CRF3\03192002\1509559B.raw